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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/930,784	08/15/2001	William M. Gillon	50588/360	2550

32641 7590 08/10/2005

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EXAMINER	
KHOSHNOODI, NADIA	
ART UNIT	**PAPER NUMBER**
2133	

DATE MAILED: 08/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/930,784	GILLON ET AL.	
	Examiner	Art Unit	
	Nadia Khoshnoodi	2133	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 August 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *15 August 2001* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *7/9-20-2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 6, and 11 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 29 (for claim 1), 38 (for claim 6) and 23 (for claim 11) of U.S. Patent No. 6,751,352 in view of Akiyama et al., United States Patent No. 6,463,155. This is a provisional obviousness-type double patenting rejection.

As per claim 1:

Although the conflicting claims are not identical, they are not patentably distinct from each other because independent claim 29 of copending App. No. 09/871,415 substantially teaches encrypting a first group of multimedia channels using conditional access encryption, i.e. a first type of encryption, to produce a first group of encrypted multimedia channels; encrypting said first group of multimedia channels using a different type of encryption, i.e. a second type of encryption, to produce a second group of encrypted multimedia channels; and simulcasting, i.e. concurrently transmitting, said first group of encrypted multimedia channels with said second group of encrypted multimedia channels to a plurality of multimedia subscribers having either a

new multimedia receiver or a legacy multimedia receiver, said second group of encrypted multimedia channels being decryptable by said new multimedia receivers and said first group of encrypted multimedia channels being decryptable by said legacy multimedia receivers.

Not explicitly disclosed is encrypting and transmitting a first and second group of multimedia channel keys. However, Akiyama et al. teach encrypting a group of multimedia channel keys using a first type of encryption to produce a first group of encrypted multimedia channel keys (col. 8, lines 49-53); encrypting said group of multimedia channel keys using a second type of encryption to produce a second group of encrypted multimedia channel keys (col. 27, lines 4-57). Therefore, it would have been obvious to a person in the art at the time the invention was made to modify the claimed invention in copending App. No. 09/871,415 to encrypt the channel keys as well in order to maintain security of the keys when they are transmitted. This modification would have been obvious because a person having ordinary skill in the art, at the time the invention was made, would have been motivated to do so since it is suggested by Akiyama et al. in col. 1, line 63 – col. 2, line 11.

As per claim 6:

Although the conflicting claims are not identical, they are not patentably distinct from each other because independent claim 23 of copending App. No. 09/871,415 substantially teaches encrypting channels using both conditional access encryption and a different form of encryption; simulcasting said channels encrypted in both CA encryption and said different form of encryption to subscribers having either a new multimedia receiver or a legacy multimedia receiver, i.e. receiving a plurality of encrypted keys, each of said keys for decrypting a respective plurality of encrypted multimedia channels; and said channels encrypted using said different

form of encryption being decryptable by said new multimedia receivers and said channels encrypted using said CA encryption being decryptable by said legacy multimedia receivers, i.e. decrypting said encrypted multimedia keys and using said decrypted multimedia keys to decrypt one or more of said multimedia channels.

Not explicitly disclosed is encrypting and transmitting a first and second group of multimedia channel keys. However, Akiyama et al. teach encrypting a group of multimedia channel keys using a first type of encryption to produce a first group of encrypted multimedia channel keys and encrypting a group of multimedia channel keys using a second type of encryption to produce a second group of encrypted multimedia channel keys. Therefore, it would have been obvious to a person in the art at the time the invention was made to modify the claimed invention in copending App. No. 09/871,415 to encrypt the channel keys as well in order to maintain security of the keys when they are transmitted. This modification would have been obvious because a person having ordinary skill in the art, at the time the invention was made, would have been motivated to do so since it is suggested by Akiyama et al. in col. 1, line 63 – col. 2, line 11, col. 8, lines 49-53, and col. 27, lines 4-57.

Also not explicitly disclosed is re-encrypting said multimedia channels using an alternative encryption technique and storing said re-encrypted multimedia channels on a mass storage device. However, Akiyama et al. teach that when storing keys, it is important to update the encryption key regularly. Therefore, it would have been obvious to a person in the art at the time the invention was made to modify the claimed invention in copending App. No. 09/871,415 to re-encrypt the multimedia channels with an updated key, i.e. re-encrypting the multimedia channels and then storing those channels. This modification would have been obvious because a

person having ordinary skill in the art, at the time the invention was made, would have been motivated to do so since it is suggested by Akiyama et al. in col. 18, lines 7-16 and 38-49 and col. 20, lines 20-35.

As per claim 11:

Although the conflicting claims are not identical, they are not patentably distinct from each other because independent claim 23 of copending App. No. 09/871,415 substantially teaches encrypting channels using both conditional access encryption, i.e. a first encryption format, and a different form of encryption, i.e. a second encryption format; said channels encrypted using said different form of encryption being decryptable by said new multimedia receivers, i.e. first encryption format being decryptable by a first type of multimedia receiver, and said channels encrypted using said CA encryption being decryptable by said legacy multimedia receivers, i.e. said second encryption format being decryptable by a second type of multimedia receiver.

Not explicitly disclosed is encrypting and transmitting a first and second group of multimedia channel keys. However, Akiyama et al. teach encrypting a group of multimedia channel keys using a first type of encryption to produce a first group of encrypted multimedia channel keys (col. 8, lines 49-53); encrypting said group of multimedia channel keys using a second type of encryption to produce a second group of encrypted multimedia channel keys (col. 27, lines 4-57). Therefore, it would have been obvious to a person in the art at the time the invention was made to modify the claimed invention in copending App. No. 09/871,415 to encrypt the channel keys as well in order to maintain security of the keys when they are transmitted. This modification would have been obvious because a person having ordinary skill

in the art, at the time the invention was made, would have been motivated to do so since it is suggested by Akiyama et al. in col. 1, line 63 – col. 2, line 11.

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: fig. 1, element 123, and fig. 2, elements 270-271. Please review the specification and figures in order to ensure that all elements described in the specification are in the figures and that all elements depicted in the figures are referred to in the specification. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

Claims 1 and 18-20 are objected to because of the following informalities.

As per claim 1:

The Applicants recite the limitation "receivers capable of..." in line 8. However, it has been held that the recitation that an element is "capable of" performing a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. In re Hutchison, 69 USPQ 138.

As per claims 18-20:

These dependent claims derive from claims where the statutory class is of machine type, a "system," however claims 18-20 further limits the parent claim where the statutory class of a "method" is used. This inconsistency can be solved by amending the claims by replacing "method" in line 1 of the claims 18-20 with "system."

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 11-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claim 11:

Claim 11 recites the limitation "said keys" in lines 2-6. There is insufficient antecedent basis for this limitation in the claim. Decryption keys have however been previously introduced. In order to further treat these claims on their merits, it is presumed that Applicants intended to refer to the previously introduced decryption keys.

As per claim 12:

Claim 12 recites the limitation "all of said keys" in line 2. There is insufficient antecedent basis for this limitation in the claim. Decryption keys have however been previously introduced. In order to further treat these claims on their merits, it is presumed that Applicants intended to refer to all of the previously introduced decryption keys.

As per claims 13-20:

These claims are rejected by virtue of their dependency.

Claim Rejections - 35 USC § 103

I. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

II. Claims 1-6 and 8-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akiyama et al., U.S. Patent No. 6,463,155 and further in view of Ludtke, U.S. Patent No. 6,154,206.

As per claim 1:

Akiyama et al. substantially teach a computer-implemented method comprising: encrypting a group of multimedia channel keys using a first type of encryption to produce a first group of encrypted multimedia channel keys (col. 8, lines 49-53); encrypting said group of multimedia channel keys using a second type of encryption to produce a second group of encrypted multimedia channel keys (col. 27, lines 4-57). Not explicitly disclosed is concurrently

transmitting said first group of encrypted multimedia channel keys with said second group of multimedia channel keys to a plurality of multimedia subscribers having multimedia receivers capable of decrypting either said first group of encrypted multimedia channel keys and/or said second group of multimedia channel keys.

However, Ludtke teaches concurrently sending the OOB data which acts as a key for descrambling the multimedia channels. Therefore, it would have been obvious to a person in the art at the time the invention was made to modify the method disclosed in Akiyama et al. to encrypt the OOB data with a master key to create and securely transmit two different groups of keys used to decrypt various multimedia channels that a plurality of receivers have access to depending on entitlement information. This modification would have been obvious because a person having ordinary skill in the art, at the time the invention was made, would have been motivated to do so since it is suggested by Ludtke in col. 3, lines 36-54 and col. 7, lines 11-17.

As per claim 2:

Akiyama et al. and Ludtke substantially teach the method as in claim 1. Furthermore, Ludtke teaches the method wherein said second type of encryption is digital video broadcasting ("DVB") encryption (col. 6, lines 64-66).

As per claim 3:

Akiyama et al. and Ludtke substantially teach the method as in claim 1. Furthermore, Akiyama et al. teach the method further comprising: transmitting entitlement information with said group of multimedia channel keys encrypted using said second type of encryption, said entitlement information indicating which of said multimedia channels a user has the right to decrypt (col. 16, line 20 – col. 17, line 20).

As per claim 4:

Akiyama et al. and Ludtke substantially teach the method as in claim 3. Furthermore, Akiyama et al. teach the method further comprising: decrypting said second group of encrypted multimedia channel keys at a multimedia receiver (col. 16, lines 47-57).

As per claim 5:

Akiyama et al. and Ludtke substantially teach the method as in claim 4. Furthermore, Akiyama et al. teach the method further comprising: searching said entitlement information to determine whether said user has the right to view a particular channel selected by said user; and decrypting said channel using one of said decrypted keys if said user has said right (col. 16, line 43 – col. 17, line 20).

As per claim 6:

Akiyama et al. substantially teach a method comprising: receiving a plurality of encrypted keys, each of said keys for decrypting a respective plurality of encrypted multimedia channels (col. 16, line 43 – col. 17, line 2); decrypting said encrypted multimedia keys (col. 16, lines 50-55); using said decrypted multimedia keys to decrypt one or more of said multimedia channels (col. 16, lines 55-57); and storing multimedia channels on a mass storage device (col. 16, lines 47-50).

Not explicitly disclosed is re-encrypting said multimedia channels using an alternative encryption technique. However, Ludtke et al. teach re-encrypting the multimedia channels using a copy protection scheme. Therefore, it would have been obvious to a person in the art at the time the invention was made to modify the method disclosed in Akiyama et al. to re-encrypt the multimedia channels using an alternative encryption technique in order to copy protect the

signal. This modification would have been obvious because a person having ordinary skill in the art, at the time the invention was made, would have been motivated to do so since it is suggested by Ludtke in col. 10, lines 24-27.

As per claim 8:

Akiyama et al. and Ludtke substantially teach the method as in claim 6. Furthermore, Ludtke teaches the method further comprising: decrypting one or more of said multimedia channels using said alternative decryption technique responsive to a user request to view said one or more multimedia channels (col. 18, line 50 – col. 19, line 10).

As per claim 9:

Akiyama et al. and Ludtke substantially teach the method as in claim 6. Furthermore, Akiyama et al. teach the method wherein decrypting comprises: reading entitlement information identifying multimedia channels which a user has a right to view; and decrypting only those decryption keys for multimedia channels identified by said entitlement information (col. 19, lines 11-28).

As per claim 10:

Akiyama et al. and Ludtke substantially teach the method as in claim 6. Furthermore, Akiyama et al. teach the method wherein decrypting comprises: reading entitlement information identifying multimedia channels which a user has a right to view; decrypting all keys associated with said multimedia channels; and using only those decryption keys for multimedia channels identified by said entitlement information (col. 24, lines 1-7).

As per claim 11:

Akiyama et al. substantially teach a system for processing multimedia channels

comprising: transmitting decryption keys for decrypting said multimedia channels, said keys encrypted in both a first encryption format and a second encryption format (col. 27, lines 1-51). Not explicitly disclosed is said keys encrypted in said first encryption format being decryptable by a first type of multimedia receiver; and said keys encrypted in said second encryption format being decryptable by a second type of multimedia receiver.

However, Ludtke teaches different control units with different authorization rights for various multimedia channels, where there are different encryption formats used for different multimedia channels. Therefore, it would have been obvious to a person in the art at the time the invention was made to modify the system disclosed in Akiyama et al. for a first type of multimedia receiver to decrypt a first encryption format and a second type of multimedia receiver to decrypt a second encryption format. This modification would have been obvious because a person having ordinary skill in the art, at the time the invention was made, would have been motivated to do so since it is suggested by Ludtke in col. 1, lines 42-58 and col. 6, lines 46-49.

As per claim 12:

Akiyama et al. and Ludtke substantially teach the system as in claim 11. Furthermore, Akiyama et al. teach wherein said second encryption format permits all of said keys to be decrypted in real-time as they are received by said multimedia receiver (col. 27, lines 43-51).

As per claim 13:

Akiyama et al. and Ludtke substantially teach the method as in claim 12. Furthermore, Ludtke teaches the method wherein said second type of encryption is digital video broadcasting ("DVB") encryption (col. 6, lines 64-66).

As per claim 14:

Akiyama et al. and Ludtke substantially teach the system as in claim 11. Furthermore, Akiyama et al. teach the system further comprising: transmitting entitlement information indicating which of said multimedia channels a user has a right to view (col. 19, lines 11-28).

As per claim 15:

Akiyama et al. and Ludtke substantially teach the system as in claim 14. Furthermore, Akiyama et al. teach the system further comprising: said second type of multimedia receiver decrypting only those keys identified by said entitlement information (col. 28, lines 40-52).

As per claim 16:

Akiyama et al. and Ludtke substantially teach the system as in claim 14. Furthermore, Akiyama et al. teach the system further comprising: said second type of multimedia receiver decrypting said decryption keys and using said decryption keys to decrypt multimedia channels identified by said entitlement information (col. 24, lines 1-7).

As per claim 17:

Akiyama et al. and Ludtke substantially teach the system as in claim 11. Furthermore, Akiyama et al. teach the system further comprising: said second type of multimedia receiver decrypting one or more of said keys and using said one or more keys to decrypt one or more multimedia channels (col. 24, lines 1-7).

Not explicitly disclosed is said second type of multimedia receiver re-encrypting said multimedia channels using an alternative encryption technique. However, Ludtke et al. teach re-encrypting the multimedia channels using a copy protection scheme. Therefore, it would have been obvious to a person in the art at the time the invention was made to modify the method

disclosed in Akiyama et al. to re-encrypt the multimedia channels using an alternative encryption technique in order to copy protect the signal. This modification would have been obvious because a person having ordinary skill in the art, at the time the invention was made, would have been motivated to do so since it is suggested by Ludtke in col. 10, lines 24-27.

As per claim 18:

Akiyama et al. and Ludtke substantially teach the method as in claim 17. Furthermore, Ludtke teaches the method wherein said second type of encryption is digital video broadcasting ("DVB") encryption (col. 6, lines 64-66).

As per claim 19:

Akiyama et al. and Ludtke et al. substantially teach the method as in claim 17. Furthermore, Akiyama et al. teach the system further comprising: storing said multimedia channels in said alternative encryption format on a mass storage device (col. 16, lines 47-50).

As per claim 20:

Akiyama et al. and Ludtke substantially teach the method as in claim 19. Furthermore, Ludtke teaches the method further comprising: decrypting and playing back one or more of said multimedia channels from said mass storage device responsive to a user request to play back said one or more of said multimedia channels (col. 5, line 61 – col. 6, line 12).

III. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Akiyama et al., U.S. Patent No. 6,463,155 and Ludtke, U.S. Patent No. 6,154,206 as applied to claim 6 above, and further in view of Davio et al., U.S. Patent No. 5,001,753.

As per claim 7:

Akiyama et al. and Ludtke substantially teach the method as in claim 6. Not explicitly

disclosed is the method wherein said alternative encryption technique is DES encryption. However, Davio et al. teach that implementing DES in a certain way can reduce the amount of memory used. Therefore, it would have been obvious to a person in the art at the time the invention was made to modify the method disclosed in Akiyama et al. for the alternative encryption technique to be implemented by using DES encryption. This modification would have been obvious because a person having ordinary skill in the art, at the time the invention was made, would have been motivated to do so since it is suggested by Davio et al. in col. 10, line 65 – col. 11, line 2.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nadia Khoshnoodi whose telephone number is (571) 272-3825. The examiner can normally be reached on M-F: 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on (571) 272-3819. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nadia Khoshnoodi

Nadia Khoshnoodi
Examiner
Art Unit 2133
8/2/2005

NK

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